R E P O R T R E S U M E S

ED 019 453 VT 002 496

SCHOOL ADMINISTRATORS AND VOCATIONAL EDUCATION.
AMERICAN VOCATIONAL ASSN., WASHINGTON, D.C.

PUB DATE DEC 64

EDRS PRICE MF-$0.25 HC-$1.32 31P.

DESCRIPTORS- *VOCATIONAL EDUCATION, *ADMINISTRATOR GUIDES, *PROGRAM DEVELOPMENT, PROGRAM PLANNING, *FEDERAL LAWS, STATE PROGRAMS, FEDERAL AID,

GENERAL POLICIES AND PRACTICES TO HELP SCHOOL ADMINISTRATORS PROVIDE VOCATIONAL EDUCATION FOR BOTH YOUTHS AND ADULTS ARE PRESENTED AS ANSWERS TO 38 QUESTIONS COVERING TOPICS SUCH AS (1) OBJECTIVES, (2) TYPES OF PROGRAMS, (3) TYPES OF STUDENTS, (4) PURPOSE OF EACH SUBJECT FIELD, (5) THE ROLE OF THE FEDERAL GOVERNMENT, (6) FEDERAL AND STATE AGENCIES, (7) THE ROLE OF THE STATE STAFF, (8) APPLICATION FOR FEDERAL, STATE, OR LOCAL FUNDS, (9) LOCAL SCHOOL ORGANIZATION, (10) STEPS IN ESTABLISHING A PROGRAM, (11) DUTIES OF PERSONNEL, (12) THE ROLE OF VOCATIONAL GUIDANCE, (13) RELATION TO INDUSTRIAL ARTS EDUCATION, AND (14) PROGRAM EVALUATION. SOURCES OF ADDITIONAL INFORMATION AND BRIEF EXPLANATIONS OF THE SMITH-HUGHES ACT, THE GEORGE-BARDEN ACT, AND THE VOCATIONAL EDUCATION ACT OF 1963 ARE INCLUDED. (EM)

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SCHOOL ADMINISTRATORS and VOCATIONAL EDUCATION

prepared by the
committee on publications

AMERICAN VOCATIONAL ASSOCIATION, INC.
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FOREWORD

There is an increasing awareness among school administrators and the electorate concerning the responsibility of publicly supported schools to provide vocational and technical education for the American people. Training for purposeful employment is distinctive in its aims and services, and school administrators should be interested in understanding the philosophy and the specific administrative policies of vocational education.

Vocational Education for American Youth, *a previous publication of the American Vocational Association, explains the needs and practices involved in vocational training for young people. Its purpose was to give school administrators and the lay public an over-all view of vocational education.*

This publication, however, has been prepared to help administrators provide vocational education for both youth and adults. For convenience and brevity, it is presented in question and answer form.

The control and supervision of vocational education are in the hands of the states; therefore, policies and procedures vary greatly throughout the country. For this reason, many of our answers are necessarily general and refer the administrator to an appropriate source of specific information. This booklet emphasizes general policies and practices rather than the details of vocational education in all its subdivisions. Additional, detailed information must come from sources within the respective states.

Public school administrators now developing programs will be assisted by the ideas this booklet presents. Administrators who have not recognized the technological challenges to our public schools will be stirred to action by becoming acquainted with them. The suggestions proposed are in harmony with sound administrative practices and have been provided by experienced leaders of vocational education. It is our hope that the facts and operating principles presented here will help administrators to develop, promote, and maintain effective programs of vocational education in their communities.

December 1964

1. What is the purpose of vocational education?

The objective of vocational education is to instruct individuals in occupational skills supplemented by the knowledge necessary to meet the demands of specific jobs. It involves the development of skills, abilities, attitudes, understandings, working habits, and proper appreciations that result in a satisfying useful life of work and good citizenship. To a large extent, vocational education is terminal in nature enabling the trainee to enter and progress in useful and productive employment. A carefully planned program of vocational education should develop competent workers economically, emotionally, physically, and socially.

2. For whom is vocational education intended?

Vocational education is designed to serve members of *five groups*:

(a) Young people enrolled in high schools or vocational schools
(b) Young people who have completed academic high school and need additional education and special instruction for employment
(c) Boys and girls who have dropped out of school
(d) Adults who want to increase their skills and knowledge
(e) Unemployed adults who must be retrained due to automation and other technological changes.

It is designed to equip persons for all types of employment, including homemaking. Those who desire additional training for advancement, those who are preparing for a semiskilled occupation, those who must retrain themselves for new fields, and those who are seeking special training as technicians are potential students of vocational education.

3. Why is vocational education necessary?

It is essential that we maintain an annual economic growth to provide employment for the millions entering the labor market. *Education for a Changing World of Work*, the report of the Panel of Consultants on Vocational Education, stated:

> One need not be an economist to see readily that education—especially vocational education—is directly related to the annual total output of goods and services produced by a given labor force. Enhancing the skill of the labor force through education and training will expand output even if technology, capital, and labor remain fixed quantities.

The Summary Report of the Panel declared:

> Our advancing technology demands more skilled craftsmen and highly skilled technicians in occupations requiring scientific knowledge. Vocational and technical education must prepare many more technicians and skilled craftsmen for employment in industry, business, agriculture, and the health fields.

Education for work should be an integral part of a total educational program. Each person should be given the training he needs to support

himself and to gain through his own efforts the privileges and enjoyments available in our society.

Education for employment must be an important part of free secondary education if this nation is to continue to prosper and retain its leadership in a competitive world. The high school must give more attention to preparing its pupils for the world of work. The result of increased and better types of vocational education will contribute to more satisfying and useful lives for the next generation.

Vocational education for adults is especially important. Rapidly changing social and technological conditions make it necessary for workers in industry, business, distribution, agriculture, and homemaking to keep themselves informed and prepared for new situations. Homemaking for adults, for example, is greatly needed because the home is still one of the major institutions for educating future citizens. Children are influenced by the many social changes constantly affecting homemaking.

Distribution costs are a great expense to the consumer goods industry, and one cause of this high cost is the lack of trained employees in a field offering one of the greatest opportunities for vocational training. Most of the employees in distributive occupations have had little or no formal preparation for their work.

Due to the nature of modern agriculture, the need is not for an increasing number of farmers but for more businesslike, scientifically trained farmers as well as trained people for agriculturally related occupations.

The increasing demand for office and clerical employees emphasizes the importance of training on pre-service and in-service levels for office occupations.

Industry is constantly in need of well-trained mechanics to manufacture and service the complicated and precision machinery now so common in the industrial world. Adult programs should offer the semiskilled an opportunity for the upgrading which would enable them to fill the existing need for precision workers.

All these shortages should be met by vocational training programs for young people and adults. Only through such training can we improve the efficiency of our citizens and promote the economic and social prosperity of our nation.

4. What are the responsibilities of the school in providing vocational education for youth and adults?

All members of the community are the responsibility of a school system, and courses for adults should form one of the major features of all vocational programs.

The major requirements for admission to vocational programs should be interest of the applicant and his ability to profit from the instruction. There is no upper-age limit. Vocational education, although offered through public schools, is not restricted to young people of high school age. Some of the post-high school terminal courses and supplementary evening and part-time instruction undertake to improve the varied skills of industrial

and business workers, young and adult farmers, and homemakers.

Courses for adults mean preparation for gainful employment rather than adult hobby classes and recreational activities—although they are matters of community interest and amusement.

The President's Panel pointed up what should be done in this changing world of work by stating vocational education must:

- Offer training opportunities to the 21 million non-college graduates who will enter the labor market in the 1960s.
- Provide training or retraining for the millions of workers whose skills and technical knowledge must be updated, as well as those whose jobs will disappear due to increasing efficiency, automation, or economic change.
- Meet the critical need for highly skilled craftsmen and technicians through education during and after the high school years.
- Expand vocational and technical training programs consistent with employment possibilities and national economic needs.
- Make educational opportunities equally available to all, regardless of race, sex, scholastic aptitude, or place of residence.

Furthermore, there is an urgent need for the training or retraining of youth and unemployed adults in order that they may achieve employment stability. This means that courses in many more occupations including the office and service fields should be made available. More equipment and facilities are needed to extend these opportunities to many more workers, especially those living in communities where specialized training is a critical need.

Apprentice and journeymen training opportunities should be expanded by mutual action of employers and unions.

5. What are the recognized fields of vocational education?

Vocational education may be defined broadly as that process which prepares the individual to earn a living. It extends from the simplest forms of training for elementary job opportunities to higher education in preparation for positions in the professions. When the term is applied to publicly-supported schools, it refers to occupational education and training not leading to a baccalaureate degree. Certain well-defined areas of vocational education are recognized.

Among the branches are: (a) agricultural education, (b) business and office education, (c) distributive education, (d) home economics education (e) technical education, (f) trade and industrial education and (g) vocational guidance. They have been given this status because of the special areas of the economy in which they serve.

6. What is the purpose of each field of vocational education?

Agricultural education aims to develop farming proficiency of prospective farmers and increase the skill of adults already engaged in farming. It develops the ability to produce farm commodities efficiently, to sell farm products advantageously, to conserve soil and other natural resources, to use mechanization effectively in farming and home chores, to manage a farm business, and to improve home living in certain areas.

Agricultural education on the secondary level should provide also for those who are planning or engaged in other agricultural occupations and can benefit from such vocational and technical education of less than college grade. Furthermore, it should provide basic vocational education for those planning careers in fields of agriculture requiring a baccalaureate degree.

Business and office education provides instruction for those who want to enter or advance in specific office occupations. It develops job skills, through initial, refresher, and upgrading education, and develops ability to use these skills in office situations.

Distributive education is specialized instruction in marketing, merchandising, and management. It offers practical training opportunities to those already engaged in distributing goods and services or to those who want to enter these occupations. These people increase their marketing competency as well as improve other related skills. They become more valuable to their employers and to the buying public—and, in addition, further their own ambitions.

Home economics education has as its major purpose preparing young people for the responsibilities and activities of homemaking and assists both youth and adults in the achievement of individual and family well-being. One of its prime objectives is the improvement of family life through more efficient development and utilization of human and material resources. The training of adults in modern methods of homemaking and home related occupations is becoming increasingly important. There is currently a trend in home economics education curriculum to emphasize the relationship of home economics to occupational training and wage-earning programs.

Technical education prepares students to earn a living in an occupation in which success is dependent largely upon technical information and understanding of the laws of science and principles of technology as applied to modern design, production, distribution, and service.

Trade and industrial education provides instruction in industrial work, skilled and semiskilled trades, crafts, and occupations relating directly to the designing, producing, maintaining, or servicing of manufactured products. It also includes training in the service trades and technical occupations. The courses deal with instruction in manipulative skills, safety practices, effective work habits, industrial morale, trade judgment, technical knowledge, and other related information essential to successful employment and advancement.

Vocational guidance is the process of assisting individuals to understand their capabilities and interests, to choose a suitable vocation, and to prepare for, enter, and make successful progress in it.

7. What relationships have been established—through federal legislation—between the Federal Government and vocational education programs?

Federal aid to vocational education is based on two fundamental ideas. First, vocational education is a matter of national concern, essential to

our welfare, security, and international leadership; and, second, federal funds are necessary to help promote the programs and assist the states in making adequate provision for this necessary training.

Three of the acts which provide for these federal funds are:

(a) *The Smith-Hughes Act.** This original legislation made funds available to the various states for the promotion of vocational education.

(b) *The George-Barden Act.** It was found necessary to extend the use of federal funds for additional vocational activities and consequently this legislation was enacted. When additional legislation was enacted, the original authorizations became known as Title I. Title II dealt with practical nursing and Title VIII of the National Defense Education Act which authorized an appropriation for training of technicians became Title III of the George-Barden Act. The fishery amendment, to promote the industry by providing for personnel training, was added to Title I.

(c) *The Vocational Education Act of 1963.** The nation's changing economy and technological advancement demanded additional funds to cover the extension of vocational education programs necessary to train, retrain, and upgrade millions of the present and potential labor force.

The vocational education acts contain certain specific requirements for federally-aided programs, emphasizing the public purpose of this aid. The standards that apply everywhere are:

(a) Education provided under these acts shall be under public supervision and control.

(b) The controlling purpose of such education shall be to fit people for gainful employment.

(c) Such education shall not lead to a baccalaureate degree and shall be designed to meet the needs of persons 14 years of age or over.

Detailed information about the federally-subsidized programs can be found in the individual plans of the states. (See question 11, page 10.)

This national program *is not subject to centralized control from Washington.* It has been judged undesirable and undemocratic for the Federal Government to attempt to deal directly with institutions providing vocational education. The purpose of federal assistance is the development of vocational education with the cooperation of the states and the stabilization of the whole program through the establishment of sound basic national procedures for operation. Control of the program is delegated to the individual states and local communities.

8. What federal agency is responsible for the promotion of vocational education on the national level?

In order to carry out the responsibilities of the Federal Government

*See appendix for additional information concerning this legislation.

under the provisions of the vocational education acts, a Division of Vocational and Technical Education was established in the U. S. Office of Education, a part of the Department of Health, Education, and Welfare.

The Assistant Commissioner for Vocational and Technical Education heads the division, which included an administrative staff and, in the past, the following five branches: (a) agricultural education, (b) distributive education, (c) home economics education, (d) technical education, and (e) trade and industrial education. In 1962, a staff was added to administer the training programs under the Area Redevelopment Act and the Manpower Development and Training Act.

Partly as a result of the passage of the Vocational Education Act of 1963, this division has been organized on a different basis. The staff has been consolidated into three subdivisions: (a) professional resources, (b) field administration, and (c) research and development.

The responsibilities of the three major subdivisions are:

I. PROFESSIONAL RESOURCES—This staff will work on program operation problems as they are identified in order to assist the states and communities in establishing and conducting more effective vocational education programs. The staff will be organized into three branches.

1. *Student Instruction Branch*—with specialists in secondary, postsecondary and adult instruction programs and programs for groups such as the socio-economically disadvantaged.

2. *Occupations Branch*—with specialists in the occupational categories. The 1963 act authorizes training in all nonprofessional occupations that do not ordinarily require a college degree and includes—for the first time—training in office occupations. As new vocational fields develop through scientific and technological advances, occupational specialists will be incorporated into the staff.

3. *Auxiliary Service Branch*—with specialists in curriculum development, teacher education, facilities, vocational guidance, and work-study plans.

II. FIELD ADMINISTRATION—This staff will function as an operating arm of the division providing administrative direction and coordination to a field service staff in each of the nine regional offices of the Department of Health, Education, and Welfare. It will serve as the channel through which professional consultation and assistance is made available to the regional offices and the states.

III. RESEARCH AND DEVELOPMENT—The function of this subdivision is authorized under Section 4 (c) of the Vocational Education Act of 1963 and is expected to provide much of the leadership in this field. Under the 1963 Act, research and the development of demonstration programs are emphasized to an unprecedented degree. The fact that funds authorized for research amount to $22.5 million in the fiscal year ending June 1967, and each fiscal year thereafter, underscores the extent to which research is emphasized in this act.

The new Research and Development staff will be committed to these objectives:

- The establishment of standards for federally sponsored research and development projects.
- The utilization of research and development resources of related disciplines. This will involve enlisting the services of economists, sociologists, psychologists, and other professional workers to assist in evaluation and planning.
- Coordination and assistance in the expansion of state and regional research and development capabilities.
- The promotion and implementation of innovative programs with built-in provisions for evaluation.
- The implementation of research and development projects concerned with preparing and motivating individuals for life-long productive careers.
- The development of professional vocational personnel, including personnel for research and development.
- The communication and dissemination of relevant information derived from federally sponsored and state supported research projects.[1]

9. What agency handles the administration of vocational education within a state?

The first responsibility for vocational education programs rests with the states. The states have developed administrative policies in keeping with their own educational objectives and practices. Therefore, there is no standardized pattern for the whole country. A State Board for Vocational Education is the legal authority for the operation of every state program. (In many states, the State Board of Education serves as the State Board for Vocational Education. Some states have created separate and independent boards. In other states, the staff of the State Board for Vocational Education is considered to be part of the State Department of Education under the Chief State School Officer, who frequently serves as the Executive Officer of the State Board for Vocational Education.)

The state staff in vocational education usually is made up of a State Director for Vocational Education and anyone else needed for the promotion, organization, coordination, and direction of the total vocational program in the state. Most states provide for a state supervisor in every field of vocational education. The staff also may include personnel responsible for activities in such fields as vocational guidance, research, public relations, editorial, finance, statistics, and clerical work.

The State Board for Vocational Education has basically five main duties. They are:

(a) Preparing the state plan (see page 10)

[1]Source of information concerning reorganization, *Tooling up for the Future*, by Dr. Walter M. Arnold, Assistant Commissioner and Director, Division of Vocational and Technical Education, U.S. Office of Education, October 1964, American Vocational Journal.

(b) Administering the total program of vocational education within the state
(c) Supervising and improving instruction in vocational education
(d) Fostering the establishment of new types of needed vocational training
(e) Training vocational teachers on a contractual basis through cooperation with colleges and universities in teacher education programs.

The state board also collects information necessary for assuring the state government that local programs have complied with the state plan and therefore are eligible for reimbursement from federal funds.

10. What help may be expected from the staff of the state administration for vocational education?

The services of the different states vary according to available funds and the size of the professional staff, but the following types of assistance are usually available to local school administrators.

(a) Supervisory consultant service provides representatives to work with the local staff on community needs as well as administrative and supervisory problems in planning, organizing, operating, and evaluating local programs in all fields of vocational education.
(b) Teacher consultant service offers help in selection of teachers, in-service training, and provides information about qualifications for teaching vocational subjects.
(c) Assistance is provided in improving instruction through the development of courses of study and instructional materials for teachers, personal consultation with teachers, group conferences, publications, and suggesting ways of evaluating the instruction in programs of vocational education.
(d) Publications including manuals to aid in the interpretation of the state plan, reports of research and surveys, and bulletins about vocational education are usually available.
(e) Assistance is given in conducting community surveys, follow-up studies, and other research activities.
(f) Promotion and organization of statewide and sectional conferences, workshops, professional meetings, and other types of service to vocational personnel are offered.

Whenever the local administrator needs help in planning or operating a vocational program, he is urged to consult the state director or the state supervisor of a particular vocational field, stating clearly the problem to be discussed. (In some states, inquiries should be directed to a district supervisor.) Assistance may be given through personal consultation, mail, or available publications.

11. What is the state plan?

A state plan, required under terms of the federal acts, is the description

of a state's program of vocational education for the succeeding year. It must furnish certain information required by federal statutes, but, in every other respect, it is a description of what the state chooses to do to meet its own educational objectives and training needs.

Each state determines and describes in the plan the duties and qualifications of state and local vocational personnel, teacher-training facilities, teacher qualifications, minimum standards for plant and equipment, requirements for hours and length of courses, provisions for supervision and coordination of courses, entrance requirements, standards for curriculums, courses of study, and other specific information for implementing vocational education programs. This plan, after it has been approved by the U. S. Commissioner of Education, Department of Health, Education, and Welfare as conforming to the official policies of the U. S. Office of Education, becomes, in effect, a contract between the state and the Federal Government. Federal funds may be used to reimburse those activities that meet the standards included in the approved state plan.

The State Board for Vocational Education makes certain that the terms of the state plan have been met by reviewing the courses and obtaining necessary records and reports before it authorizes requests for reimbursements from federal and state funds.

Details of American vocational education programs are determined in the states and *not* in Washington, D. C. The relationship with the Federal Government is one of cooperation, not of submission or control.

12. How are local programs of vocational education financed?

Programs of vocational education are supported by public funds from state, local, and federal appropriations. Federal grants serve to promote and stabilize the vocational program, but they do not relieve the states of their responsibility for financial support. Under certain circumstances, *each dollar expended by the Federal Government must be matched with a dollar from state and/or local funds.* In the majority of states, more than half the cost of vocational education is paid by state and/or local funds.

13. For what local expenditures may federal funds be used?

To the extent that the state plan makes provision, and subject to approval by the State Board for Vocational Education, funds are reimbursable from Smith-Hughes or George-Barden Act funds according to the following purposes for which they are used:

(a) Salaries and necessary traveling expenses of teachers and supervisors of agriculture, homemaking, distributive, and industrial education subjects—also salaries of vocational guidance counselors

(b) Salary and necessary traveling expenses of a local director of vocational education

(c) Cost of purchase or rental of equipment for vocational instruction in courses which meet approved standards

(d) Salaries and necessary travel expenses of local teacher-trainers

conducting courses dealing with the professional education phases of vocational teaching.

The Vocational Education Act of 1963 encompasses the aforementioned as well as ancillary services and construction of facilities. This act is very broad in its approach to meeting the total needs of vocational education.

Salaries for teachers of subjects related to vocational education also may be reimbursed from federal funds. (Related subjects are defined as courses that improve the technical knowledge related directly to the specific occupational fields and are necessary to a complete understanding of the particular work involved.) Persons who teach academic courses necessary for building a well-rounded educational program are paid *entirely* from state and local funds.

14. Are federal funds available for reimbursing a local school for all of the expenditures listed in question 13?

Not necessarily. Federal funds are provided for the purpose of cooperating with the states in the support as well as the *promotion* of vocational education. Every state board is granted a limited amount of money to be apportioned as profitably as possible by the state officials. Special efforts usually are made to provide funds for the stimulation of new vocational programs in areas that have not been served already. Even when federal funds are available, local communities do not escape their obligation to provide funds themselves for vocational education.

15. How is application made for federal support?

Application for financial aid to local districts is made only to the State Board for Vocational Education, *not* to the U. S. Office of Education. Requisitions for reimbursement of expenses, signed and accompanied by affidavits, must be approved by the State Board for Vocational Education before they are honored by the state treasurer, who is the custodian of all federal funds allocated to the state for vocational education. Forms provided by the state boards set forth all statistical and descriptive information required to prove that the programs have been operated in accordance with the state plan.

Federal moneys are available through the Smith-Hughes and George-Barden Acts and claims can be presented from the schools only after the actual expenditures have been made. Formal requisitions for reimbursements are made at specified dates during the year. The conditions under which federal money is allocated to the various states under the Vocational Education Act of 1963 are prescribed by the federal authorities in the provisions. (See appendix.)

Each state has its own state plan (see question 11). The individual State Boards for Vocational Education should be contacted for terms of this plan. These boards usually have headquarters in the State Department of Education.

16. How much freedom is permitted a local school system in the development of a vocational program?

Legal requirements and limitations must be considered in the formulation of administrative policies for vocational education. However, a school administrator should realize that both federal and state legislation encourage high standards and maximum freedom in creating a vocational program to suit local training needs. The function of federal and state standards is the achievement of specific educational objectives established in keeping with sound, tested educational practices.

Vocational education programs may include not only courses subsidized with federal funds but also courses that are not eligible for federal subsidy but which satisfy local demands.

State Boards for Vocational Education do not use their powers to prescribe an ideal program for all schools in the state. Every community is encouraged and helped to discover its own training needs; help is offered to the communities through the establishment and maintenance of minimum standards for the courses selected by the states. Federal funds may be used to reimburse only those activities set forth in a state plan, but, of course, a local community may use its own funds to expand its vocational programs as it pleases.

17. What conditions are necessary for successful introduction of vocational education programs?

No vocational education program should be undertaken without serious evaluation of local conditions. Community surveys should be made in order to assure that:

(a) Potential student enrollment and interest are adequate for the support of the program
(b) Qualified teachers will be available
(c) Job opportunities in the service area indicate the need for the particular types of training
(d) Members of the school board and administration of the district or districts involved will support the establishment and maintenance of a vocational program
(e) The school staff is sympathetic to vocational education
(f) Parents will be interested in vocational courses for their children and adults will want to study for retraining and advancement
(g) Local employers will cooperate in the development of the program
(h) Employee groups in the area will support the program
(i) Organized community groups will help to establish and support the program.

18. When is it advisable to have a separate vocational school building and operating organization?

The distinctive objectives of vocational education are best achieved

through special personnel and school facilities. If the size of the program warrants it, a separate vocational school building and staff may be advisable and desirable. The number of students who need occupational training and employment opportunities in the area will determine the type and size of the program.

In larger cities, one or more vocational schools can arrange to handle the entire vocational program, avoiding duplication of equipment and personnel resulting from distribution of vocational programs among several high schools. Homemaking programs, however, usually are carried on as a department of a regular high school and are found in every school as a part of both general and vocational education. Some large cities maintain one separate school for a single craft or occupation. Other cities have separate vocational schools for boys and girls.

Many communities without large populations or sufficient taxable wealth find that indebtedness, inadequate plants and equipment, or overloaded teaching staffs make it difficult for them to expand their educational offerings. In these cases, the size of the administrative unit may be increased, and vocational training opportunities may be offered to a large geographical area through a school already in existence or one built expressly for the purpose.

Area vocational schools may be established on the basis of county or any other logical geographical division. An area school has a much better chance of developing into an outstanding vocational program—one that will last—than a program added to an already overloaded local school. It is possible to offer a greater variety of occupational training.

(Further information on this subject may be found in *Area Vocational Schools*, a publication of the American Vocational Association.)

There is a growing number of adults who desire occupational training which taxes the present vocational facilities. Furthermore, young people are retained in school longer due to the deferred employment entrance age. Therefore, school administrators might consider the possibilities and advantages of providing training in special vocational schools for post-high school persons, as well as adults who are unemployed due to automation and other technological changes. It is highly probable that more intensive thought will be given to providing special facilities due to the activities resulting from the Manpower Act. Already, several states provide vocational training at public expense through junior colleges (as in California), agricultural and technical institutes (as in New York), and local and state supported programs (as the Wisconsin schools of vocational and adult education).

19. What adjustments are needed if vocational programs are provided through an academic high school?

Each community need not maintain a separate school building for its vocational program. Departments and courses may be added to the curriculum of an existing high school of which the comprehensive high school is characteristic. In such cases, a special effort must be made to

provide adequate facilities and properly qualified personnel. If the instruction is to be functional, the conditions under which it is given should approximate those in the world of work.

In some smaller cities and rural communities, where homemaking and agricultural education are emphasized, vocational education needs may be met by departments within the existing secondary public school system. Facilities should be made available also for offering supplementary training through part-time and evening classes. A public school building need not be used provided the vocational education classes are under public supervision and control and meet the specific requirements of the state's provision.

Vocational courses will demand some adjustments in the traditional pattern of high school programs. Short periods may suffice for academic subjects, but they are impractical for vocational education. Periods should be made long enough to provide time for adequate instruction on a productive basis. A sound program usually demands that the day be divided into two parts with at least 50 per cent of the total school time devoted to practical training in a shop or laboratory and the other 50 per cent to related subjects and general studies.

20. How are community training needs determined?

Vocational education, to be really functional, must be based on programs designed to meet existing community needs. Programs in different fields should be offered only when conditions reveal a need for training in specific occupations. These training needs may be accurately determined by such methods as:

(a) Community surveys
(b) Meetings of interested citizens
(c) Conference surveys between employer and labor groups under the auspices of the local board of education
(d) Student inventories
(e) Follow-up studies of graduates
(f) Advisory committees.

A state administrative staff for vocational education will give aid in conducting surveys in the fields of agriculture, trade and industry occupations, distributive occupations, office occupations, and homemaking in order to determine training needs. State and local educational surveys by experienced vocational leaders result in recommendations and information that give the school administrator a broad, reliable basis for the establishment of a training program.

21. What subjects should be included in a vocational curriculum?

No detailed answer can cover all fields and all state requirements, but these general statements can be made:

- Daily shop work or supervised work experience must be arranged.
- Practical training must be coordinated with instruction in re-

lated technical subjects (mathematics, science, drawing) so that the pupil will be able to understand the "why" as well as the "how" of what he is learning.

- English and social studies are necessary for full social and civic growth.
- Other subjects and opportunities for recreation should be included to create a well-rounded program whenever there is sufficient time for them. In the same fashion as any public school, a vocational program should prepare its pupils to participate in the worlds of work *and* good citizenship.

22. Where can help be obtained for the initiation of a sound program of vocational education?

Assistance in planning and organizing a new program can be found at both state and local levels. The administrator first should seek assistance from the State Director for Vocational Education and his professional staff. Any school representative may benefit from the training and experience of the State Board for Vocational Education. The administrator should study carefully the existing state plan for vocational education and familiarize himself with the procedures and practices set forth by the state for sound vocational programs.

Next, the administrator should confer with responsible representatives of the community, including his own school staff and local leaders, to determine the scope and content of an adequate program. He should seek personal interviews with experienced administrators and supervisors of vocational education in comparable communities.

Local or state educational surveys are another source of help. General education administrators and other interested groups can assist experienced vocational leaders to organize surveys which will indicate accurately the need for training in state and local areas. If the community has not yet benefited by such a detailed analysis of needs and facilities, a school administrator might well undertake a survey.

23. What are advisory committees and how can they help the school administrator?

An advisory committee enables the school administrator to communicate freely with the groups in the community which he is trying to serve. A general advisory committee consists of laymen representing management and various occupations, persons with broad experience who have gained the respect of the public and their working associates. Before they are invited to serve on an advisory committee, they should be approved by the board of education, which is the organization responsible for all school programs. Such a committee can assist in the establishment of policies concerning the organization and administration of a vocational program. Also, it can be of great value in maintaining good public relations with the various community groups interested in educational programs, and in coordinating the work of the craft advisory committees.

In addition to a general advisory committee, it is often advantageous to appoint individual craft committees. Their responsibility in this case is giving advice on the content of specific courses, suggesting proper equipment, and securing the support of labor and management in keeping the instruction in tune with current occupational practices.

When the public knows what the school is trying to do, interest and public support are increased. Advisory committees report the accomplishments of the school to the groups of citizens they represent. When the public knows that experienced and respected laymen are helping to operate the vocational program in a community, confidence in the school's training is enhanced.

(For further information on the effective use of advisory committees, consult the AVA publication *Vocational Advisory Committees.*)

24. What steps should a local administrator take to establish an effective vocational education program?

(a) Verify the interest expressed in the community through studies and questionnaires
(b) Enlist support of school personnel
(c) Inform local board of education and obtain approval for preliminary investigations
(d) Secure advice and assistance of members of the staff of State Board for Vocational Education
(e) Establish representative lay advisory committees with the approval of the local board of education
(f) Determine and verify the need for specific training
(g) Determine occupations for which training will be given and consult advisory committees in development of tentative course outlines
(h) Determine available and needed training equipment and accessories
(i) Plan operating details of the school or department—admission requirements, class schedules, specific supplies, etc.
(j) Organize a budget covering cost of equipment and personnel
(k) Secure approval from local board of education and State Board for Vocational Education
(l) Provide competent instructors and supervisory personnel
(m) Establish functioning supervision and put vocational program into operation
(n) Enlist the aid of cooperating agencies concerning the aims and objectives of the new program
(o) Establish a functioning placement and follow-up service
(p) Evaluate progress of the program periodically by consulting advisory committee, employers, and graduates.

25. What personnel is required for a program of vocational training?

All vocational courses need instructors with proper qualifications includ-

ing occupational experience. Related subjects in trade and industrial programs, in distributive education, and the service fields require teachers who have been employed in industry, or business, or service occupations. Experience has proved that vocational and technical subjects cannot be taught successfully by those who have not been gainfully employed in the occupations for which they are preparing workers. Vicarious experience is not sufficient for these positions.

The need for additional administrative or supervisory personnel depends on state recommendations and the extent of the planned program. Competent supervision is very necessary for an efficient vocational program, and the staff should include a supervisor or department head whenever three or more vocational teachers are employed. In some states, supervision for certain vocational fields is provided on a district basis by the State Board for Vocational Education; in other states, the supervisory functions are performed by local personnel.

When the program is extensive and when it covers more than one field, provision should be made for a local director of vocational education. In certain communities, where the program is not large enough to justify the employment of a vocational director, the individual supervisor for each service assumes the responsibility for directing the work of his service. He reports directly to the high school principal or, more frequently, to the superintendent of schools. If the program is large enough and if a cooperative part-time education program is carried on, it is advisable to employ a coordinator responsible for correlating school work with activities in industry, business, and service fields. In smaller centers, a coordinator-teacher may carry the dual responsibility of teaching and coordinating the program.

26. What are the duties of a vocational director?

The success of any vocational education program is directly dependent on the quality of its leadership. The local director must provide resources, consultation, leadership, and cooperative service designed to improve instruction. He has the responsibility of administering, planning, coordinating, and promoting the program. He is the official representative of all phases of vocational education in the school system. Only a person with experience, college training, broad knowledge of all the vocational fields, and the ability to help each department render maximum community service should be given such a responsibility.

27. What qualifications should vocational teachers have?

Vocational education teachers must possess both practical experience and adequate professional backgrounds. Work experience, technical knowledge, and demonstrable skills are as important as hours of college credit, especially in trade, industrial, and distributive education. Teachers of vocational agriculture generally are graduates of agricultural colleges or agricultural departments of state colleges. They should have had several years of experience on a well-organized farm or in some related

farm occupations. Instructors in industrial, distributive, and business courses should have had a required number of years of recent paid employment experience prior to teaching. Because of the nature of their work, teachers of homemaking usually begin teaching immediately after graduation from a teacher-training institution. They have gained most of their practical skills from home and family living experiences. Most of these teachers will supplement their college education with further direct experiences in homes and with families thus adding to their professional effectiveness. Home economics teachers responsible for training in service-related occupations and wage-earning should have had specialized training for such programs.

All vocational teachers must remain occupationally competent and alert to improvements and new techniques in their fields of specialization. They should have the respect of both labor and management. All teachers should have the mature judgment and qualities of leadership necessary for the acceptance and respect of their students.

28. What are the requirements for approval of teachers of vocational education?

Every State Board for Vocational Education determines the requirements for teachers within its jurisdiction, and there is a wide variety of requirements among the states. For this reason, only a general statement can be made on this important point. The local administrator should refer to his state plan for specific details.

State requirements for professional training range from approximately 8 to 32 credit hours for special courses on a college level, but the content of courses differs from state to state. A majority of vocational teachers ultimately go far beyond the minimum requirements. Teachers of industrial education, whose occupational competency is so important, are usually high school graduates and have satisfactory work experience of three to eight years in the occupations they plan to teach. Teachers of agriculture and homemaking are usually graduates of a four-year college course in these subjects. In many states, persons with special abilities may be approved for teaching adult courses in any of the fields of vocational education. Professional teacher education in these cases is provided through evening courses, summer institutes, short intensive training courses, and in-service training.

The persons who helped to frame the vocational acts recognized that one of the essential features of a sound program of vocational education is an adequate supply of competent teachers. The regulations provide specific funds for teacher training and require that a state spend a specified amount for this training in order to become eligible for teacher salary reimbursement.

29. Where can help be secured in locating competent vocational teachers?

Assistance in finding satisfactory personnel can be secured from the State Board for Vocational Education, which is familiar with all institu-

tions responsible for teacher training. The administrator also should seek the advice of the local advisory committee members. These leading representatives of business, industry, agriculture, and homemaking may recommend qualified, experienced individuals, from specialized fields, who might be interested in teaching.

AVA maintains a Personnel Recruitment and Placement Service for the purpose of locating competent vocational personnel.

30. How may vocational education be promoted among high school students?

Able and interested recruits with occupational aptitudes are key factors in the success of a secondary school vocational program. Every effort should be made to attract them by giving status and prestige to education for work. The school authorities should emphasize the dignity of labor.

Promotional activities should begin in the junior high school with vocational guidance talks and exploratory courses in industrial arts. In the senior high school, career days, business education days, films, guest speakers, and field trips sponsored by industries will help to develop interest in vocational education. When a new program is being planned, interest can be created among students by letting them participate in surveying the needs for the program and the probable values to be derived from it.

31. Which students of high school age should be encouraged to enroll in vocational courses?

Admission to any vocational class should be based on evidence that the applicant can benefit from the instruction he is about to receive and that he possesses the qualifications necessary for employment and successful use of his training. Demonstrated ability and interest in a subject should be determined before a student is permitted to enroll in a vocational course.

Vocational education is *not* designed for retarded students and disciplinary cases. Pupils of low ability cannot master a skilled occupation involving considerable work in courses such as mathematics. Students who cause special disciplinary problems should be placed in classes suited to their abilities and interests, not enrolled in vocational courses to "keep them busy." This is unfair to students who are there by choice.

In some states, special provisions are made available for the teachable students not qualified for skilled level instruction. These programs sometimes are referred to as occupational training.

32. What is the place and function of vocational guidance?

It is very important to guide young persons into desirable occupational fields. Therefore, vocational guidance is an essential factor in a sound educational program. It enables individuals to make wise decisions about their life's work. It furnishes the student with evidence about his own

abilities and aptitudes and provides comprehensive information about occupations, training, and employment opportunities.

Counseling should be done, in cooperation with the vocational teachers, but only by professional workers with adequate education and work experience. High school students need help in choosing a life's work, and one of the greatest contributions of the guidance services is the planning of an educational program leading to a realistic vocational objective. Placement of graduates of vocational programs in the fields for which they are prepared and follow-up studies of their progress are other major responsibilities of the guidance service. Continual counseling services should be provided while the students are in school and should be continued to assist adults as well as high school pupils.

33. What additional equipment will be required for vocational courses?

Specifications for equipment depend entirely on the aims and content of the different courses. However, all equipment should conform to current occupational standards and should be comparable to the type most effectively used in each occupation. State Boards for Vocational Education are responsible for insuring the availability of a suitable building and proper equipment for a vocational course and for planning the attainment of high standards by the students. The state plan should be consulted before any purchases are made and local administrators should write to the State Department regarding the availability of suitable surplus government property for use in vocational programs. The advice of representative local advisory committees is very valuable in establishing standards of selection for basic equipment, adequate working space, safe working conditions, and general facilities.

34. Why and how should actual work experience be provided for high school students?

Work experience is essential to a sound program of vocational training since learning by doing is part of the basic philosophy of vocational education. Actual working conditions should be approximated as closely as possible in school shops and classrooms where instruction in agricultural, homemaking, industrial, business, and distributive education is given. Because of the value of participation in a real working situation, the school also should make every effort to provide on-the-job experience for students in all vocational fields. Work experience in agriculture is obtained by the individual farming programs of the students either on their home farms or in related occupations under the supervision of their vocational agriculture teacher. Home experience programs are carried on by students of homemaking. Students in occupational training or wage-earning courses related to home economics should have the opportunity to gain work experience in a laboratory or with actual facilities where the work is done. The students in trade and industrial education gain work experience in the school shops where facilities approximate those of in-

dustry. Students of business also should gain such experience in situations approximating those of their field.

Cooperative part-time education provides actual work experience for trade and industrial students in specified occupations by allowing the student to spend part of his time in the school and part at work on a formal schedule at a prearranged rate of compensation. Both school and employer cooperate in training the student; each should realize his own responsibility in this cooperative educational arrangement. In a well-conducted cooperative part-time program, there must be close coordination, which is advantageous to both the school and the employer.

A modification of the original concept of cooperative education provides part-time work experience for students of industrial, distributive, and office occupations. It has been designed primarily for a smaller community where there are not enough employment opportunities for the establishment of a class in any one occupational area. Different jobs within a general vocational field may be represented in one class, and the classroom instruction may consist of a general core of information for all members, with provisions for supplementary technical and occupational information arranged for individual study. This type of part-time work does *not* meet the standards of a real cooperative program as the original connotation implies.

35. What is the important distinction between industrial arts education and vocational-industrial education?

The distinction is one of controlling purpose. Industrial arts education is considered to be a *phase of general education*, involving both a study of and experience with the tools, materials, processes, products, and occupations of an industrial society. It is concerned with orientation, avocational interests, consumer literacy, development of limited manipulative skills, training in some mechanics, social understandings, and cultural relationships.

Vocational-trade and industrial education, on the other hand, aims to fit its pupils for useful and gainful employment by providing *necessary training in a specific occupation or family of occupations.* It is terminal in character, leading directly to employment.

Industrial arts instruction in the seventh, eighth, and ninth grades helps pupils to make occupational choices by providing basic exploratory experience. A strong, effective program of industrial arts is thus a prerequisite for a sound program of trade and industrial education. It enables students to make a more intelligent selection of a vocation and allows them to enter vocational classes with certain work habits, limited skills, and appreciations that will be useful in their chosen occupations. Industrial arts education, continued as an elective course in tenth, eleventh, and twelfth grades, contributes to the educational growth of pupils by developing a better understanding and appreciation of the factors involved in our industrial society and by cultivating vocational skills that make for more effective adjustment to a highly mechanized civilization. Industrial

arts at the high school level may make a significant contribution to the student who is planning to further his education. It may guide the way to occupations or professions where knowledge of industry and manual dexterity are essential. On the other hand, vocational-industrial education in the senior high school prepares students to fill the requirements of paid employment in specific occupations immediately following graduation from school.

36. How may programs of vocational education be evaluated?

Vocational education, like any other type of education, must be evaluated in terms of its specified objectives. Many states have made noticeable progress in the development of criteria for use in evaluating vocational programs, and the school administrator should turn to his State Board for Vocational Education for guidance in measuring the effectiveness of a local program. Advisory committees can help the administrator by evaluating his program in terms of community reactions and local needs. Follow-up of students is another means of evaluation. An excellent indication of the success of a vocational program is the extent to which graduates are accepted by employers and are advanced in their chosen occupations.

37. What is the latest trend in meeting the needs of vocational education?

Some communities may find it advisable to sponsor the development of area vocational schools. They offer a diversity of courses and provide specific vocational training to potential students of a large geographical area.

A comprehensive bulletin referred to on page 14 describes area schools and is available from the American Vocational Association. Single copies are 50¢ each.

38. How may the school administrator learn more about vocational education?

Vocational education means more than the addition of a laboratory or a shop to a school. Realistic vocational education calls for an emphasis on learning by doing as well as the acquisition of knowledge from textbooks. It demands certain changes in the traditional pattern of education in order to provide practical, realistic, and functional learning experiences. It must not be considered as just another high school course. A sympathetic understanding of the place of vocational education in the total program and a philosophy of vocational education in its broadest aspect are essential if the administrator hopes to establish constructive and progressive policies.

In order to acquaint himself with the objectives and procedures of vocational education, the administrator can arrange for a conference with his state director or with the state supervisors of vocational education. If possible, he should enroll in a college course dealing with the philosophy and practice of vocational education. Visits to schools where ef-

fective programs are in operation will be both informative and stimulating. Periodicals serving the vocational field and state and federal publications dealing with vocational education can furnish valuable information.

By taking these steps, the school administrator will be able to introduce vocational education into his community with an understanding of its distinctive objectives and a genuine appreciation of its value.

Conclusion

Although the information in this bulletin is brief in character, it is sufficiently inclusive to enable a school administrator to conceive and initiate a program of vocational education in his community. If further information is necessary, the sources of additional facts and assistance are indicated. It is the hope of the American Vocational Association that this publication will be of service to all general and vocational school administrators throughout the nation.

This bulletin has been confined to the discussion of vocational education, which includes technical education.

In general, technical education has been considered a post-high school subject and has been available in community or junior colleges, agricultural and technical institutes, and post-high school vocational-technical schools. In recent years, additional technical courses have been developed on the secondary level. This innovation is due to the present day demand for technicians.

A technician is a type of worker who occupies a place between the skilled worker and the engineer or other professional personnel. The emphasis in his training has been placed on technical knowledge rather than on special skills. It is true, however, that he must possess also some degree of skill. "To expand their output—a national need of urgent importance—the Federal Government must increase its support of full-time, post-high school vocational and technical training."[1]

In many cases, technical courses have been organized in the regular academic high schools, in other situations, the courses have been organized in the vocational and area vocational schools. The comprehensive high schools also have developed technical courses leading to employment in technical activities.

Although the term technician originally referred to positions in industry, there are now technicians in dentistry, chemistry, medicine, and many other lines of human endeavor. There appears to be a place in various occupations for technicians who have had specialized training pertaining to the occupational field involved.

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[1]As stated in the Summary Report of the Panel of Consultants on Vocational Education, page 19.

APPENDIX

SMITH-HUGHES ACT[1]

The act provided a grant in perpetuity to the states of approximately $7.2 million annually for the promotion of vocational education in agriculture, trade and industrial education, and home economics . . . The act provided that $3 million be allocated to agriculture, $3 million to trade and industrial and home economics education (not more than 20 per cent of which could be used for home economics); $1 million for teacher training (not less than 20 per cent nor more than 60 per cent of which would be used for the training of teachers in any one of the categories of agriculture, trade and industry, or home economics) . . .

To participate in the benefits of the legislation, the states were required to create or designate a state board for vocational education; prepare a state plan showing the programs they intended to provide under the Vocational Act; make an annual report to the U.S. Office of Education showing the work done during the year and the receipt and expenditure of the money; and, provide the program only in schools under public supervision or control. The minimum age for students was 14 years.

The money for agricultural education was allocated to the states on the basis of the ratio of the state's rural population to the total U. S. rural population; urban population was used as the basis for allocations for trade and industrial and home economics education; and, total population was used as the basis for distribution of the teacher-training funds.

GEORGE-BARDEN ACT[2]

The funds were to be expended "for the same purpose and in the same manner" as had been provided in the Smith-Hughes Act, with several specified differences.

Ten million dollars was authorized for agricultural education, to be allocated among the states on the basis of farm population. Authority was given in the act for the expenditure of funds in support of two youth organizations in agriculture: the Future Farmers of America and the New Farmers of America. For home economics, $8 million was authorized, the basis of allotment being the rural population of the state. For trade and industrial education, $8 million was authorized, to be allocated among the states on the basis of non-farm population. An authorization for distributive occupations was made in the amount of $2.5 million allocated to the states on the basis of total population. Funds for distributive occupations were limited to support for part-time and evening courses for employed workers. An appropriation of $350,000 was authorized to enable the Office of Education to carry out the provisions of the act. The act also included an open-end authorization to guarantee states minimum amounts for each occupational category of vocational education.

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[1]Public Law 347, 64th Cong., approved Feb. 23, 1917 (as described in *Education for a Changing World of Work*, Report of the Panel of Consultants on Vocational Education).
[2]Public Law 586, 79th Congress, approved Aug. 1, 1946 (as described in *Education for a Changing World of Work*, Report of the Panel of Consultants on Vocational Education).

Practical Nursing—The trades and industry appropriation authorized by the George-Barden Act was utilized to some extent for practical nurse training. The Health Amendments Act of 1956[3] specifically authorized practical nurse training under the George-Barden Act. The act authorized $5 million for practical nurse training annually for a period of five years. In 1961, the authorization was extended to June 30, 1965. The practical nurse training provision of the Health Amendments Act became Title II of the George-Barden Act and the previous authorization became Title I.

Fishery Amendment—An act of Congress approved August 8, 1956, authorized an appropriation of $375,000 for vocational education in the fishery trades and industries and in the distributive occupations.[4] Distribution of the funds was to be determined by the U. S. Commissioner of Education in consultation with the Secretary of the Interior. The purpose of the act was to promote the fishing industry by providing for the training of personnel. The act was an amendment to Title I of the George-Barden Act.

Title VIII of the National Defense Education Act,[5] "Area Vocational Education Programs," authorized an appropriation of $15 million annually for four years to support programs limited exclusively to the training of highly skilled technicians in recognized occupations necessary to the national defense.

These provisions of the National Defense Education Act became Title III of the George-Barden Act. In October 1961, Congress extended the National Defense Education Act for two years to June 30, 1964. Allotments were made to the states according to the state's proportion of the total amount allocated under the George-Barden Act for agriculture, home economics, trades and industries, distributive occupations, and fisheries.

VOCATIONAL EDUCATION ACT OF 1963[6]

This act authorizes a new permanent program of federal assistance for vocational education amounting to $60 million for fiscal year 1964; $118.5 million for fiscal year 1965; $177.5 million for fiscal year 1966, and $225 million for subsequent fiscal years.

These funds will be allotted among the states on the basis of two factors—population groups and per capita income. State Boards for Vocational Education will be the sole agency for administering federal funds allotted to states. The new funds are not earmarked for specific occupational fields. They may be expended for vocational education programs that will prepare people for employment in any occupational field that does not require a baccalaureate degree. Vocational programs may be conducted in comprehensive or specialized high schools, area vocational schools, junior and community colleges, or universities that offer terminal vocational programs.

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[3]Public Law 911, 84th Cong., approved Aug. 2, 1956.
[4]Public Law 1027, 84th Cong., approved Aug. 8, 1956.
[5]Public Law 85-864, 85th Cong., approved Sept. 2, 1958.
[6]Public Law 88-210, 88th Cong., approved Dec. 18, 1963.

The act provides that vocational programs be available for persons in high schools, for those out of high school available for full-time study, for persons who are unemployed or underemployed, and for persons who have academic or socio-economic handicaps that prevent them from succeeding in the regular vocational education programs.

Federal funds also may be used for ancillary services to assure quality in all vocational education programs—for example, teacher-training, supervision and administration, research and evaluation of programs.

Ten per cent of each year's appropriation will be reserved for grants by the Commissioner of Education for research and demonstration projects in vocational education.

In addition, the act provides for an experimental four-year program for residential vocational education schools and payments for student work programs. The Commissioner of Education will determine the amount of the appropriation to be used for each of these purposes. It is understood that one residential vocational school will be initiated for the benefit of residents of the District of Columbia. Under this part of the act, authorizations are $30 million for fiscal year 1965, $50 million for fiscal year 1966, $35 million for fiscal year 1967, and $35 million for fiscal year 1968.

Matching of Federal Funds. The 1963 act requires that state and local expenditures continue at the current level of support for vocational education but does not require a state to match the new federal funds for program operation in fiscal year 1964, except where federal funds are used for construction of vocational education facilities.

For subsequent fiscal years, matching on a 50-50 basis is required. In addition, states must assure that federal funds complement but do not replace local and state funds.

Amendments to Existing Vocational Education Acts. To assure more flexibility in vocational education programs, this act amends the Smith-Hughes and George-Barden Acts to permit the federal funds to be expended in agricultural training programs for occupations related to agriculture for which knowledge and skill of agricultural subjects are involved. In addition to preparation for homemaking, home economics funds also will be directed toward homemaking skills for which there are employment opportunities. Not less than 10 per cent of home economics funds under provisions of Smith-Hughes and George-Barden Acts must be used for job-oriented training.

Preparatory training is made possible under funds authorized for distributive education, and occupational training for single skilled or semi-skilled jobs is permitted on a part-time basis for less than the traditional nine months per year and less than 30 hours per week.

Area Vocational Schools. The area technical education program, authorized under the National Defense Education Act of 1958 is made permanent by this act with an annual authorization of $15 million. In addition to extending this authority, the states will be permitted to expend new

funds on a 50-50 matching basis for the construction of area vocational school facilities.

Practical Nurse Training. The act makes permanent the practical nurse training programs authorized by Title II of the George-Barden Act. The annual authorization is $5 million.

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